A.I.A. File No. 16-D

16i
Rid

Ridge

OVERHEAD DOORS

- industrial
- commercial
- service station

wood • and • aluminum

RIDGE DOOR COMPANY

MONMOUTH JUNCTION, NEW JERSEY

DIVISION OF MUSKEGON MOTOR
SPECIALTIES CO., JACKSON, MICH.

THE *Ridge* DOOR

company

For years, The Ridge Door Company, a leading manufacturer of a complete line of residential, commercial, and industrial overhead doors and accessories, has maintained a program of continual development and expansion. This constant progress better enables us to serve the needs of the building and contracting fields.

facilities

Facilities include the most modern and scientific production equipment and methods to assure the highest quality in all components of The Ridge Door.

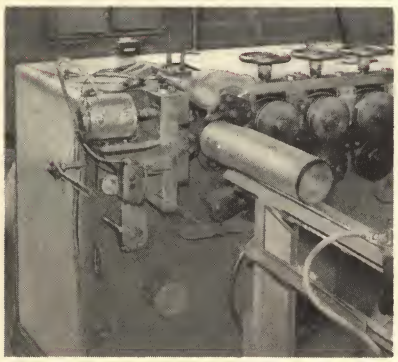
These components, including springs, track, hardware, and electric motor operators, are manufactured directly by us under the rigid quality control of our highly skilled technicians.

distribution

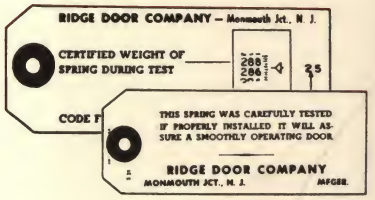
Beginning with state-wide facilities, we now offer national and export distribution of all Ridge Door products. Warehouses, maintained throughout the country, and our distributors in all principal cities combine with our staff to assist in the most efficient answers to all your needs.

features

- **certified tension and torsion springs**



All springs are helically wound from oil tempered spring wire on modern coiling machines. After coiling, all springs are heat treated to assure a quality product. Each spring is tested and the pounds pull is recorded on a tag stamped by the scale. The spring is then matched with a door by careful weight calculation which assures the maximum efficiency of door operation.


RIDGE DOOR COMPANY – Monmouth Jct., N. J.
CERTIFIED WEIGHT OF SPRING DURING TEST
CODE F
THIS SPRING WAS CAREFULLY TESTED IF PROPERLY INSTALLED IT WILL ASSURE A SMOOTHLY OPERATING DOOR
RIDGE DOOR COMPANY
MONMOUTH JCT., N. J.
MFGRS.

This tag is your assurance of quality controlled springs to give you a better operating door.

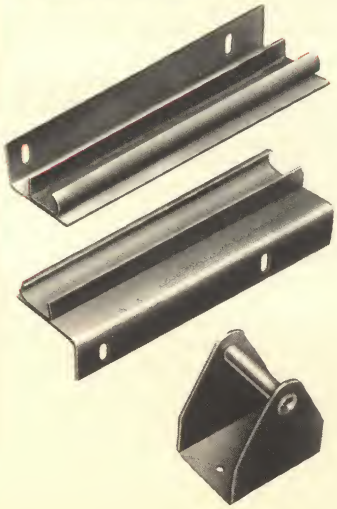
- **support stiffeners**

Stiffeners are furnished on all doors over 12′ wide. 2″ stiffeners on doors up to 16′ wide; 2½″ on all doors 16′-1″ to 18′ wide; 3½″ on doors over 18′ wide to 24′; On doors over 24′ wide, special truss type stiffeners.

- **wedge type closing action**

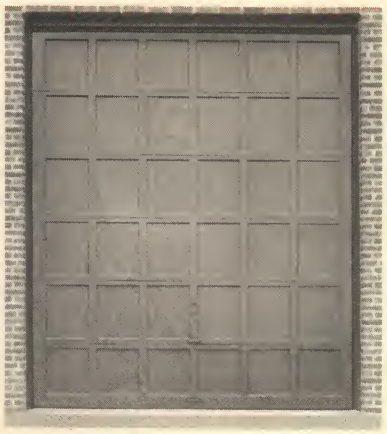
The vertical track is mounted to provide a gradual taper with the door jambs. Special graduated hinges, with roller sleeves, are attached to the door. With this wedge type action, the door is quickly free and easily opened.

- **track and hardware**



All Ridge track is rolled from high quality hot dipped galvanized steel. Where required, all track is reinforced with rolled steel angle. Ridge Golden Hardware is heavy gauge steel, zinc chromate plated, which will stand a 125 hour salt spray test.

INDUSTRIAL, COMMERCIAL, SERVICE STATION DOORS



industrial

Industrial doors for factories, terminals and many other types of installations are available in a variety of styles. Various types of operators and accessories are engineered for maximum efficiency and durability.

commercial

Commercial doors for fire stations, auto display rooms, maintenance garages and many other types of buildings are designed in wood and aluminum to conform with the most modern style. Special accessories can be furnished to meet any operational requirements.

service station

Service Station doors to meet the specifications of almost all major oil companies are available for the various types of operation. Plastic and aluminum muntins, as well as matching fixed panels and transoms can be supplied.

Blueprints on the Service Station doors will be furnished upon request.

general specifications

wood industrial doors

general — Doors shall be of the type operating in vertical and horizontal tracks substantially parallel to the ceiling when fully open and generally known as upward acting or overhead type.

wood sections Rails and stiles shall be 1¾″ thick clear Sitka Spruce, Douglas Fir or equal. All joints shall be blind doweled, glued with water proof glue and steel pinned. Adjacent edges of sections shall be rabbeted to make a shiplap joint.

Hardboard panels shall be as manufactured by U. S. Plywood Corp., Masonite Corp. or the Georgia-Pacific Corp. and guaranteed for the life of the door by the above firms which furnish the panels. Raised wood panels shall be western pine ¾″ thick, glued with water proof glue.

track and hardware - Track and angles shall be hot dipped galvanized and not less than 13 gauge cold rolled steel. The vertical track shall be supported by means of clips or continuous steel angles securely spot welded to the track. Horizontal tracks on doors exceeding 70 sq. ft. shall be reinforced for their entire length with steel angles of ample size to support door when open. A combination of offset hinges and a gradual slope in the vertical track (¼″ in 2 ft) effects wedge tight closing of the doors.

Hinges shall be of steel not less than 13 gauge with a bearing area of not less than 2.5 square inches. A sufficient number of hinges shall be used per section to insure holding sections rigidly together, in no case less than three. Each hinge shall be fastened with not less than four bolts through door. Track rollers shall be ball bearing with hardened steel balls and races. The roller assembly shall be held by a one piece tire formed on the outside of the bearing. All small hardware shall have zinc chromate finish which will stand 125 hours salt spray test.

The sheaves or winding drums shall be cast iron or steel with anti-friction bearings. Cables shall not be less than ⅛″ diameter and of 7 x 19 construction (minimum breaking strength 2500 lbs.). In all cases, cables shall be of sufficient strength to provide an ample factor of safety.

Bolts shall be cremone type, which engages both sides of track. Doors over 12′ 0″ wide shall be sufficiently reinforced to withstand reasonable wind pressure and to eliminate sagging in open position.

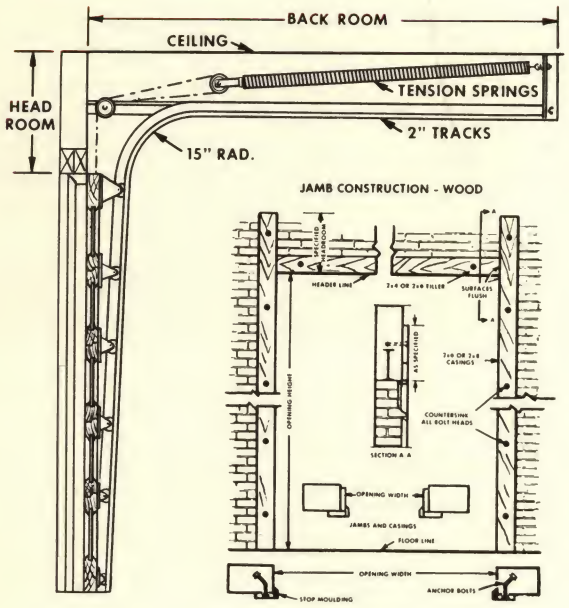
Doors shall be counterbalanced with torsion or extension springs as specified. All doors and hardware are weighed and springs are designed to balance each specific door.

aluminum industrial doors

These doors shall be extruded tubular aluminum which is available for most all commercial and industrial requirements. The sections are bolted through the muntins and stiles from rail to rail. The meeting rails are extruded to form a weather proof joint. A special rubber astragal is furnished for the bottom. Glass can be furnished as required.

track and hardware - Aluminum doors shall be supplied with the same track and hardware as specified under our wood industrial doors.

tension springs



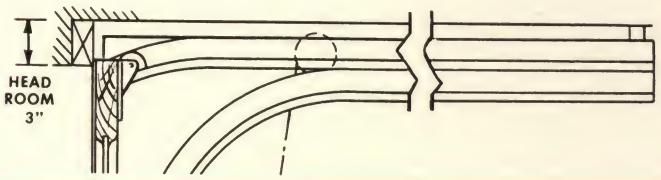
All Ridge Industrial Doors can be furnished with Extension Springs matched carefully with the door for smooth operation. On extremely heavy doors, special spring arrangements are supplied to meet the requirements of the particular door.

space requirements

Standard headroom is 12½″. Limited headrooms of 10″, 8½″, 6″, and 3″ are available, subject to engineering limitations. Side Room 4″

special 3″ head room

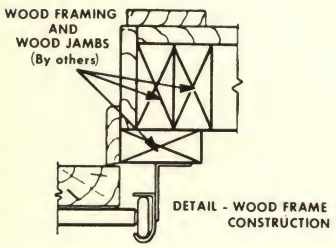
3″ headroom is supplied with double horizontal tracks. Recommended with doors not exceeding one hundred square feet. The sideroom is 5″ with this type of track.

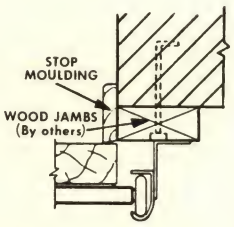


track installation details

wood jamb construction

The vertical tracks either have special brackets welded to the tracks or are mounted on a 12 gauge angle with the leg turned away from the door openings. Both the brackets and angle mountings are fastened to the jambs by means of lag bolts. Wood stop mouldings are used as a trim around the prepared opening to ensure tight door closure.

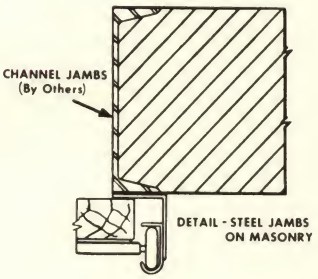


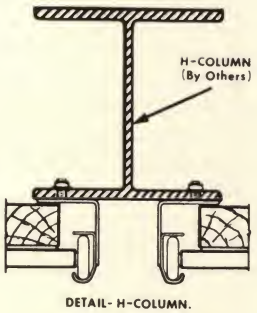


steel jamb construction

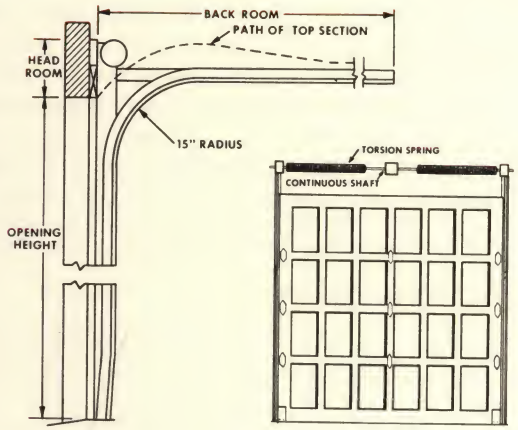
The inside face of the opening must have a flush surface unless it is above the minimum headroom requirement and outside the required amount of side space. Standard construction for steel jambs should conform with diagram below.

For steel construction overlapping jambs. Inclined vertical tracks are mounted on a 12 gauge angle with leg turned in toward door opening. Angle mounting is fastened to jambs by tapped holes or through bolt fasteners, depending on type of jamb construction.





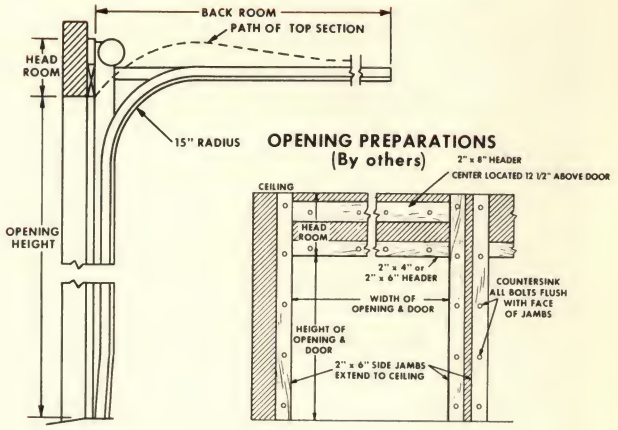
full shaft torsion springs



space requirements

Through shaft torsion springs are furnished with inside lift drums. 16″ headroom and 4″ sideroom are required. Backroom required is height of door plus 1′-6″. Special low headroom applications are available.

twin type torsion springs

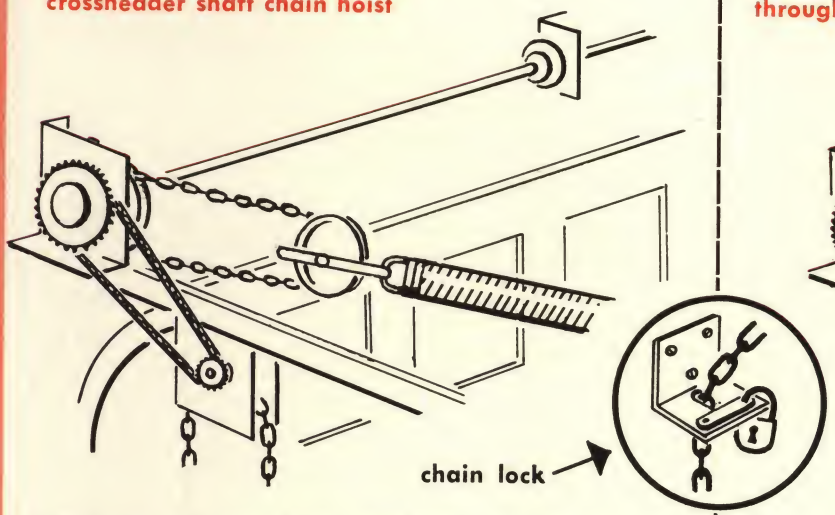


space requirements

Standard headroom is 16½″, sideroom 4″. Backroom is height of door plus 1′ 6″. Special low headroom applications are available.

methods of operation

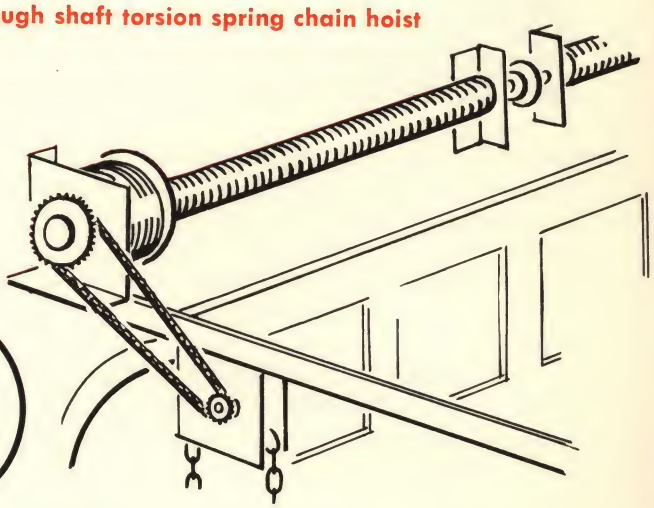
crossheader shaft chain hoist



For use only on doors equipped with extension type springs and load chain lift. Headroom required 16″, sideroom 7″.

for industrial electric operators,
see back cover

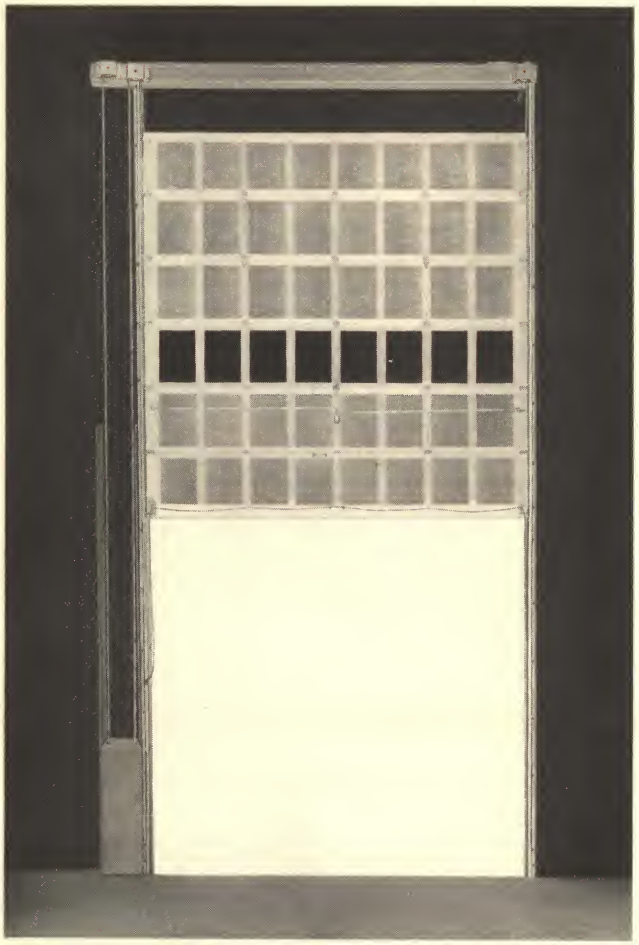
through shaft torsion spring chain hoist



Through shaft torsion spring chain hoist are available for use on doors with through shaft torsion springs. Requires 16″ headroom and 7″ sideroom.

trolley type chain hoist

Trolley type (draw bar) chain hoist can be used in the operation of doors equipped with extension springs or torsion springs. Requires 18″ head room and 7″ sideroom.



vertical lift

In factories and warehouses with high ceilings or where cranes are used, vertical lift doors are ideal. Door sections, hardware, tracks, and rollers are similar to those supplied with other models of Ridge Doors. Vertical lift doors are made with weight or through shaft torsion spring counter balancing.

high lift

High lift doors can be utilized where it is necessary to have the door clear vehicles and other equipment. These high clearance doors are furnished in all types of counter balance.

All high lift, as well as vertical lift doors, are available in the sizes of standard industrial doors. Extremely large doors are subject to approval by the engineering department.

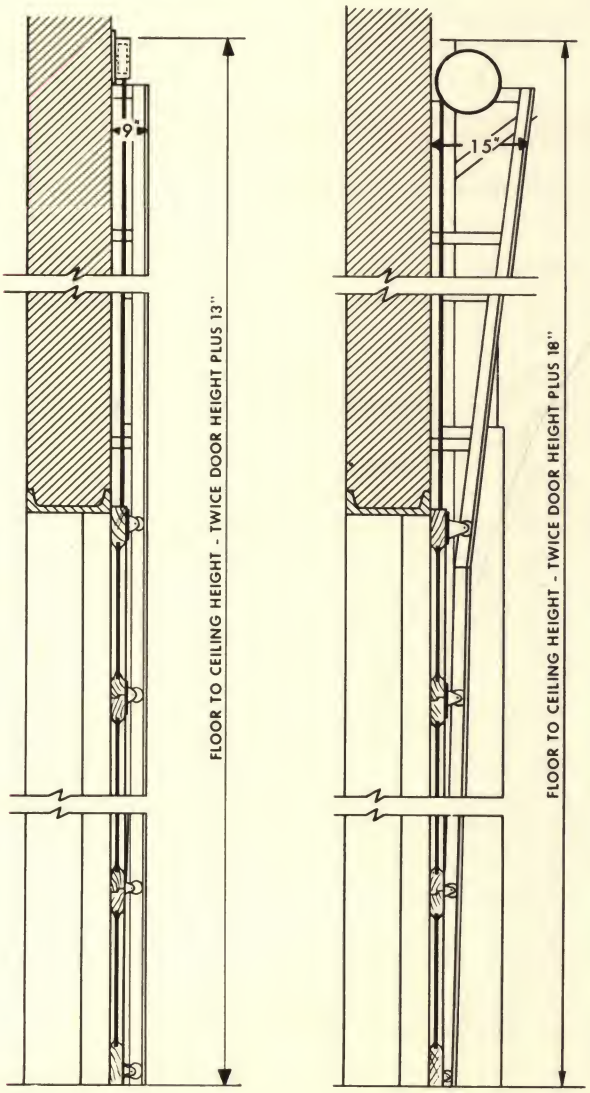
vertical lift

weight counterbalance

Used on manually operated doors where the area does not exceed 160 square feet. The lift cables, attached to each side of the door, are mechanically interlocked through sheaves to a single counterweight mounted at the side of the door. Sideroom required is 16″.

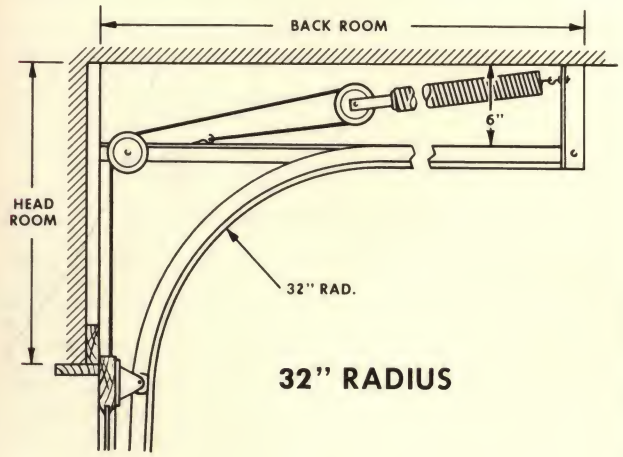
torsion spring counterbalance

For doors where area does not exceed two hundred square feet, and sideroom is limited, through shaft torsion springs should be used.



high lift 32″ radius

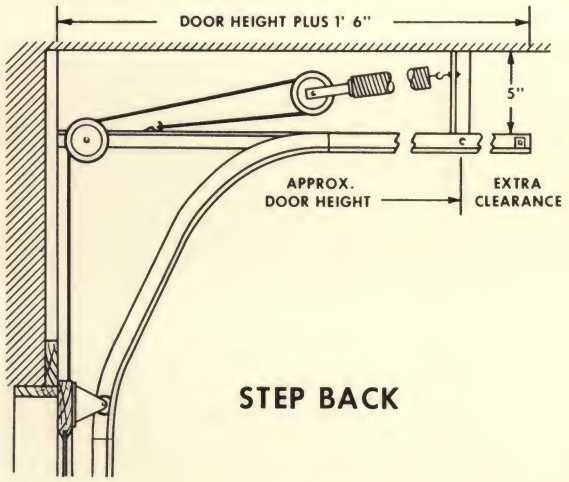
This track is used where extra clearance up to 2′ maximum is needed and may be no closer to the ceiling than 6″. This high lift equipment is generally used in gas stations to clear the automobile lift. It is also extensively used in warehouses where extra headroom is necessary for lift trucks and other equipment. This extremely efficient type of high lift is counter balanced by tension or torsion springs and requires no dummy sections. (Not over 100 sq. ft.)



32" RADIUS

high lift over 2′

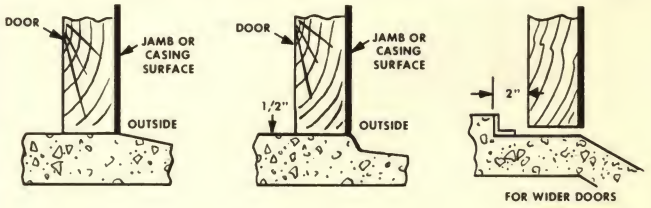
This track is used for high lifts exceeding 2′ with the following counter balance arrangements. Through shaft torsion springs can be used on doors with a vertical clearance of 8′ above the header. Doors with extension or twin type torsion springs with a vertical clearance of over 2′ but not exceeding 8′ will require dummy sections.



STEP BACK

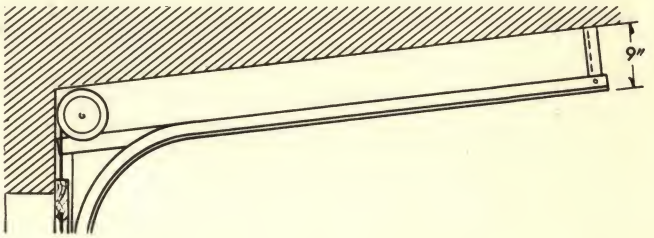
• threshold arrangements

The threshold should be designed to drain water away from the door. This will largely prevent water leakage into the building and freezing at bottom of the door in cold weather. If a step threshold is used, the door should close on the upper level. When possible, threshold footings should extend below the frost line.



• doors to follow the slope of roof

Doors following the slope of a roof can be furnished with twin type or through shaft torsion springs. These doors can be furnished with a maximum slope of 20 degrees. This type of door is required in many prefabricated steel buildings. Consult our engineers for requirements.



• wicket doors

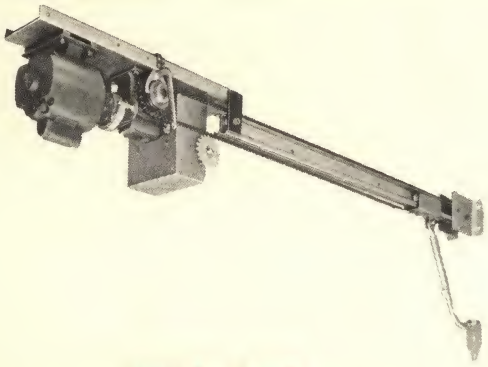
A wicket door can be supplied with any 5 section door up to 14′ wide. This service door can be built into industrial doors giving ample opening to pass in or out of the building without opening the large door. When not in use it is automatically kept closed by spring hinges.

RIDGE INDUSTRIAL ELECTRIC OPERATORS

general specifications

Instantly reversing motor—centrifugal clutch—quiet, oil-type ball bearing gear reducer—solenoid brake —ball bearing mounted driven micro limit switches—floor operated, quick release clutch for manual operation in case of power failure — quick adjusting door arm — mechanically interlocked reversing contactor—ball bearing roller trolley—full chain drive.

Three button control station, up-down-stop or two button control station, up-down. These are normally supplied for momentary contact or may be furnished with down button wired for constant contact. This compels the person operating the button to stand by during the entire closing of the door as a safety feature. All operators furnished with one control station; however, any number of control stations may be wired to operator.



trolley type

For use with doors having extension springs, twin type torsion springs and through shaft torsion springs, except high lift doors without dummy sections. For high lift doors with a crossheader shaft, refer to the jack shaft type operator.

The overall length is height of door plus 5′ 2″. Limited backroom type, height of door plus 3′ 7″. The minimum headroom is 4″ above the highest turning point of the door.

MODEL T-311

3 button control station, up-down-stop
110 v., 60 cycle, single phase only
¼ h.p. for doors up to 175 sq. ft.
1/3 h.p. for doors up to 250 sq. ft.
½ h.p. for doors up to 400 sq. ft.

MODEL T-331

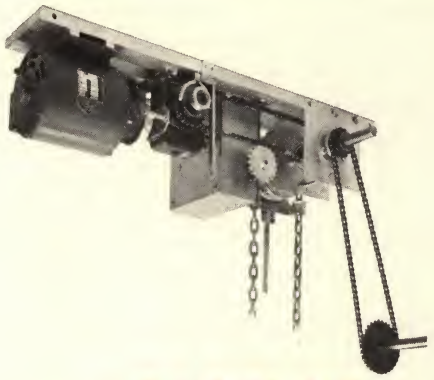
3 button control station, up-down-stop
208/220 v., 60 cycle, three phase
¼ h.p. for doors up to 175 sq. ft.
1/3 h.p. for doors up to 250 sq. ft.
½ h.p. for doors up to 400 sq. ft.

MODEL T-211

Same as Model T-311 except with two button control station, up-down.

MODEL T-231

Same as Model T-331 except with two button control station, up-down.



jack shaft type

Designed for doors where it is necessary to drive a crossheader shaft. The jack shaft operator is equipped with a quick disconnect device which enables a person at floor level to disconnect the driving mechanism so that the door or equipment may be operated manually. Limit switches will not go out of timing when door is operated manually. Jack shaft operators are for horizontal side mounting, either right or left side (specify). If the door or equipment normally requires a chain hoist for manual operation, a built in chain hoist must be ordered with the operator.

The overall length is 34⅝″ and the minimum sideroom is 16″.

MODEL JS-311

3 button control station, up-down-stop
110 v., 60 cycle, single phase only
¼ h.p. for doors up to 175 sq. ft.
1/3 h.p. for doors up to 250 sq. ft.
½ h.p. for doors up to 400 sq. ft.

MODEL JS-331

3 button control station, up-down-stop
208/220 v., 60 cycle, three phase
¼ h.p. for doors up to 175 sq. ft.
1/3 h.p. for doors up to 250 sq. ft.
½ h.p. for doors up to 400 sq. ft.

MODEL JS-211

Same as Model JS-311 except with two button control station, up-down.

MODEL JS-231

Same as Model JS-331 except with two button control station, up-down.

THE Ridge DOOR COMPANY

MONMOUTH JUNCTION, NEW JERSEY

DIVISION OF MUSKEGON MOTOR SPECIALTIES CO., JACKSON, MICH.

warehouses

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